

## General

### Title

Upper gastrointestinal (GI) cancer: proportion of patients with gastric cancer who undergo surgical resection where greater than or equal to 15 lymph nodes are resected and pathologically examined.

### Source(s)

NHS Scotland, Scottish Cancer Taskforce. Upper GI cancer clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland, Scottish Government; 2015 Jan. 41 p. [15 references]

## Measure Domain

### Primary Measure Domain

Clinical Quality Measures: Process

### Secondary Measure Domain

Does not apply to this measure

## Brief Abstract

### Description

This measure is used to assess the proportion of patients with gastric cancer who undergo surgical resection where greater than or equal to 15 lymph nodes are resected and pathologically examined.

Note from the National Quality Measures Clearinghouse: This measure is part of the Cancer Quality Performance Indicators (QPIs) collection. For more information, including a complete list of QPI measure sets, please visit the [Healthcare Improvement Scotland Web site](#) .

### Rationale

Evidence suggests that there is a relationship between increasing surgical volumes for oesophageal resection and improved patient outcomes (mortality) (NHS Quality Improvement Scotland, 2008); however, there is conflicting evidence to support an actual volume of procedures. Furthermore, the literature suggests that oesophageal and gastric resection should be performed by surgeons who work in a specialist multidisciplinary team (MDT) in a high volume hospital, with outcomes audited regularly and benchmarked nationally (Scottish Intercollegiate Guidelines Network [SIGN], 2006; Knight et al., 2011).

The Association of Upper Gastrointestinal Surgeons of Great Britain and Northern Ireland (AUGIS) recommend that a hospital carrying out

oesophagogastric surgical resection should consist of 4 to 6 surgeons, undertaking a minimum of 15 resections per surgeon per year (NHS Quality Improvement Scotland, 2008). This recommendation is based on clinical evidence, taking into account the European Working Time Directive which details the staffing requirements for hospital units, training aspects and the requirement to have 24/7 access to specialist consultants.

Maximising the number of lymph nodes resected and analysed enables reliable staging which influences treatment decision making.

Evidence recommends that at least 15 lymph nodes are resected and examined by a pathologist (Comprehensive Cancer Centre the Netherlands, 2009; Allum et al, 2011).

## Evidence for Rationale

Allum WH, Blazeby JM, Griffin SM, Cunningham D, Jankowski JA, Wong R. Guidelines for the management of oesophageal and gastric cancer. *Gut*. 2011 Nov;60(11):1449-72. [PubMed](#)

Comprehensive Cancer Centre the Netherlands. Gastric carcinoma. [internet]. Amsterdam (The Netherlands): Association of Comprehensive Cancer Centres (ACCC); 2009 May 18 [accessed 2013 Aug 01].

Knight G, Earle CC, Cosby R, Coburn N, Youssef Y, Spithoff K, Malthaner R, Wong RKS, Gastrointestinal Cancer Disease Site Group. Neoadjuvant or adjuvant therapy for resectable gastric cancer. Toronto (ON): Cancer Care Ontario (CCO); 2011 Apr 5. 70 p. (Evidence-based series; no. 2-14). [147 references]

NHS Quality Improvement Scotland. Management of bowel cancer services. Edinburgh (Scotland): NHS Quality Improvement Scotland; 2008 Mar. 41 p. [36 references]

NHS Scotland, Scottish Cancer Taskforce. Upper GI cancer clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland, Scottish Government; 2015 Jan. 41 p. [15 references]

Scottish Intercollegiate Guidelines Network (SIGN). Management of oesophageal and gastric cancer. A national clinical guideline. Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network (SIGN); 2006 Jun. 69 p. (SIGN publication; no. 87). [393 references]

## Primary Health Components

Gastric cancer; surgical lymph node resection; pathological examination

## Denominator Description

All patients with gastric cancer who undergo surgical resection

## Numerator Description

Number of patients with gastric cancer who undergo surgical resection where greater than or equal to 15 lymph nodes are resected and pathologically examined

## Evidence Supporting the Measure

### Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

## Additional Information Supporting Need for the Measure

Unspecified

## Extent of Measure Testing

The collection of data is piloted on a small number of patient records using a paper data collection form produced by the Information Services Division (ISD). The aim is to identify any anomalies or difficulties with data collection prior to full implementation. At least one NHS board in each Regional Cancer Network participates in the pilot.

## Evidence for Extent of Measure Testing

NHS Scotland. National cancer quality performance indicators: overview of development process. Edinburgh (Scotland): NHS Scotland; 2012 Dec. 7 p.

## State of Use of the Measure

### State of Use

Current routine use

### Current Use

not defined yet

## Application of the Measure in its Current Use

### Measurement Setting

Ambulatory Procedure/Imaging Center

Hospital Inpatient

Hospital Outpatient

### Professionals Involved in Delivery of Health Services

not defined yet

### Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

### Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

Unspecified

Target Population Gender

Either male or female

## National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

## Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

## Data Collection for the Measure

Case Finding Period

Unspecified

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Diagnostic Evaluation

Therapeutic Intervention

## Denominator Time Window

not defined yet

## Denominator Inclusions/Exclusions

Inclusions

All patients with gastric cancer who undergo surgical resection

Exclusions

None

## Exclusions/Exceptions

not defined yet

## Numerator Inclusions/Exclusions

Inclusions

Number of patients with gastric cancer who undergo surgical resection where greater than or equal to 15 lymph nodes are resected and pathologically examined

Exclusions

None

## Numerator Search Strategy

Fixed time period or point in time

## Data Source

Electronic health/medical record

Paper medical record

## Type of Health State

Does not apply to this measure

## Instruments Used and/or Associated with the Measure

Unspecified

## Computation of the Measure

## Measure Specifies Disaggregation

Does not apply to this measure

## Scoring

Rate/Proportion

## Interpretation of Score

Desired value is a higher score

## Allowance for Patient or Population Factors

not defined yet

## Standard of Comparison

not defined yet

## Prescriptive Standard

Target: 80%

The tolerance within this target accounts for situations where patients are not fit enough to undergo extensive lymphadenectomy and for situations where surgical resection is performed for palliation.

## Evidence for Prescriptive Standard

NHS Scotland, Scottish Cancer Taskforce. Upper GI cancer clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland, Scottish Government; 2015 Jan. 41 p. [15 references]

## Identifying Information

### Original Title

QPI 8 – lymph node yield.

### Measure Collection Name

Cancer Quality Performance Indicators (QPIs)

### Measure Set Name

Upper GI Cancer

## Measure Subset Name

Surgical Outcome QPIs

## Submitter

NHS Scotland - National Government Agency [Non-U.S.]

Scottish Cancer Taskforce - National Government Agency [Non-U.S.]

## Developer

NHS Scotland - National Government Agency [Non-U.S.]

Scottish Cancer Taskforce - National Government Agency [Non-U.S.]

## Funding Source(s)

Scottish Government

## Composition of the Group that Developed the Measure

Upper GI Cancer QPI Development Group

## Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

## Adaptation

This measure was not adapted from another source.

## Date of Most Current Version in NQMC

2015 Jan

## Measure Maintenance

The Cancer Quality Performance Indicators (QPIs) will be kept under regular review and be responsive to changes in clinical practice and emerging evidence.

## Date of Next Anticipated Revision

Unspecified

## Measure Status

This is the current release of the measure.

## Measure Availability

Source document available from the [Healthcare Improvement Scotland Web site](#) .

For more information, contact the Healthcare Improvement Scotland at Gyle Square, 1 South Gyle Crescent, Edinburgh, Scotland EH12 9EB; Phone: 0131 623 4300; E-mail: [comments.his@nhs.net](mailto:comments.his@nhs.net); Web site: [www.healthcareimprovementscotland.org/](http://www.healthcareimprovementscotland.org/) .

## Companion Documents

The following is available:

- NHS Scotland. National cancer quality performance indicators: overview of development process. Edinburgh (Scotland): NHS Scotland; 2012 Dec. 7 p. This document is available from the [Healthcare Improvement Scotland Web site](#) .

## NQMC Status

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## Production

### Source(s)

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